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Notice of Allowability	Application No.	Applicant(s)	
	10/070,449	NAGAYASU, TAKAYUKI	
	Examiner	Art Unit	
	Temesghen Ghebretinsae	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 6/8/06.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: the prior art of record fail to anticipate or render obvious the claimed radio communication receiver comprising: analog signal generating units in number P (where P is a natural number more than one) each of which receives a signal and generates a baseband analog signal from the received signal; A/D converters in number p each of which converts the analog signal of the corresponding analog signal generating unit into digital signals; and a demodulator which demodulates the digital signal output by the corresponding A/D converter based on a desired method, ***the demodulator comprising: soft-decision output equalizers in number p each of which makes a soft decision on the digital signal output by the corresponding A/D converter; a combining unit which combines the results of the soft decisions by the soft-decision output equalizers and outputs the result as a soft-decision value; and an error correcting unit which performs error correction processing with respect to the soft-decision value output by the combining unit: as claimed in claim 1;***

2. ***or demodulator comprising: soft-decision output equalizers in number P each of which makes a soft decision on the digital signal output by the corresponding A/D converter; noise-power estimating units in number P each of which estimates noise power of the digital signal output by the corresponding A/D converter; a combining unit which divides results of the soft decisions by corresponding noise power respectively, combines the results of the division to output a soft-decision value; and an error correcting unit which performs error***

correction processing with respect to the soft-decision value output by the combining unit as claimed in claim 3

3. or demodulator comprising: soft-decision output equalizers in number P each of which makes a soft decision on the digital signal output by the corresponding A/D converter based on common reliability information that is fed back after error correction; a combining unit which combines the results of the soft decisions by the soft-decision output equalizers and outputs the result as a soft-decision value; and an error correcting unit which performs error correction processing with respect to the soft-decision value output by the combining unit, generates reliability information of decoded bits, and feeds back the reliability information to the soft-decision output equalizers as claimed in claim 4.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temesghen Ghebretinsae whose telephone number is 571-272-3017. The examiner can normally be reached on Monday-Friday from 8 to 6. The examiner can also be reached on alternate.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.G.

Temesghen Ghebretinsae
Primary Examiner
Art Unit 2611

TEMESGHEN GHEBRETINSAE
PRIMARY EXAMINER
6/30/06